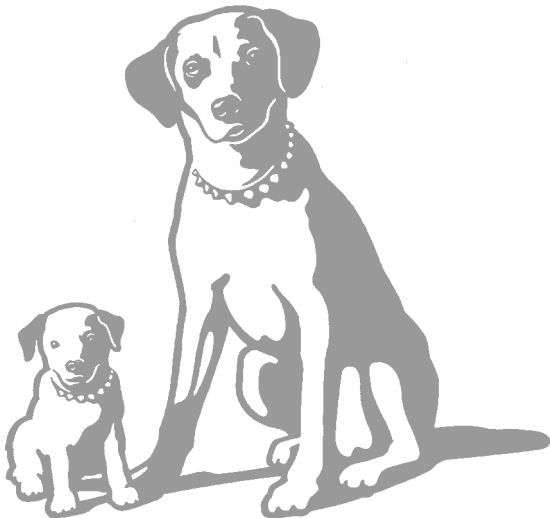


VR618HF

# USER'S GUIDE



VIDEO CASSETTE

RECORDER

**TRUST**

# Important Information


**WARNING**

To reduce the risk of fire or shock hazard, do not expose this VCR to rain or moisture.


**WARNING**

**RISK OF ELECTRIC SHOCK DO NOT OPEN**

**TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.**

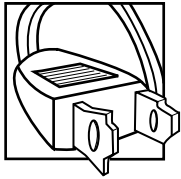


This symbol indicates "dangerous voltage" inside the product that presents a risk of electric shock or personal injury.



This symbol indicates important instructions accompanying the product.

## Cautions



**CAUTION:** To reduce the risk of electric shock, match wide blade of plug to wide slot, fully insert.  
**ATTENTION:** Pour éviter les chocs électriques, introduire la lame la plus large de la fiche dans la borne correspondante de la prise et pousser jusqu'au fond.

For U.S.A. — Operate VCR only on 120 volts, 60Hz AC power (normal house power).  
 FCC Regulations state that unauthorized changes or modifications to this equipment may void the user's authority to operate it.

## Note To Cable TV Installer

This reminder is provided to call your attention to Article 820-40 of the National Electrical Code (Section 54 of the Canadian Electrical Code, Part 1) which provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building as close to the point of cable entry as practical.

## Product Registration

Please fill out the product registration card and return it immediately. Returning this card allows us to contact you if needed.

Keep your sales receipt to obtain warranty parts and service and for proof of purchase. Attach it here and record the serial and model numbers in case you need them. The numbers are located on the back of the VCR.

Model No. VR618HF

Serial No. \_\_\_\_\_

Purchase Date: \_\_\_\_\_

Dealer / Address / Phone: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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## **Choosing a Hookup**

The hookups on pages 3 through 5 are divided into two hookup types: Basic (A) and Advanced (B).

The basic hookups show the backs of TVs that have only an antenna/cable connection. It is the easier of the two and additional accessories may not be needed.

The advanced hookups show the VCR hooked up to a monitor/receiver (TV with audio and video jacks). This connection may improve the picture quality as well as convenience of operation.

### **Answer the questions to choose the hookup for your VCR.**

#### **1. How do you receive your TV signals?**

Choose one answer from below.

- A. Outside antenna – Turn to page 3.
- B. Rabbit ears (set-top) and/or bow tie antenna – Turn to page 3.
- C. Cable System – Go to question 2.

#### **2. What type of Cable-TV system\* do you have?**

Choose one answer from below.

- A. Cable without a box – Turn to page 3.
- B. Cable box to unscramble all the channels – Turn to page 4.
- C. Cable box to unscramble only pay channels, such as HBO, Showtime, Cinemax, etc. – Turn to page 5.

\*You may need to contact your local cable company for assistance.

### **Optional Hookups**

#### **How to hook up two VCRs for copying tapes?**

- A. Select a hookup by answering the questions above.
- B. Then modify the connections as shown on page 6.

# Antenna or Cable System Without a Cable Box

## A. Basic hookup.

Use this hookup for a simple connection which requires fewer accessories.

1. Set the **CH3 CH4** switch on back of VCR to either channel 3 or 4.

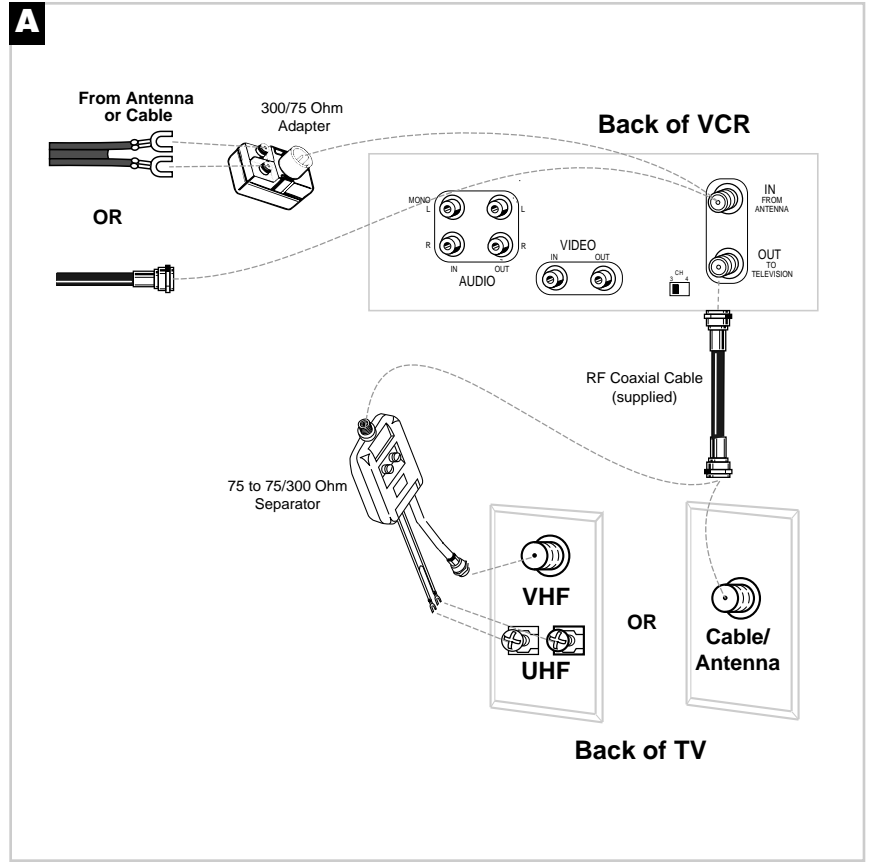
You will tune the TV to this channel and use the **TV•VCR** button to watch the VCR.

2. Connect as shown.

This connection may require additional accessories not provided.

3. Plug in power cords of VCR and TV.

4. **Continue to page 7.**



## B. Advanced hookup.

Use this hookup for slightly improved picture quality, hi-fi stereo sound, and more convenient operation — use of **TV•VCR** button not required.

1. Connect as shown.

This connection requires additional accessories not provided.

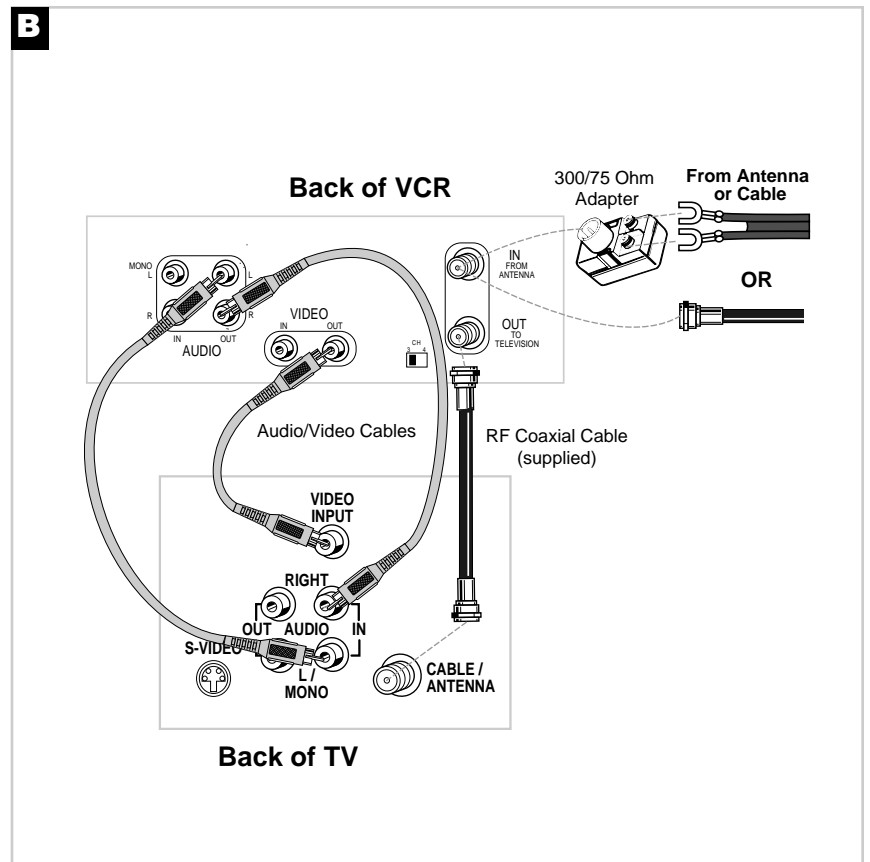
If your TV is not stereo, you may need a Y-adapter to hear sound from both left and right channels.

2. Plug in power cords of VCR and TV.

3. **Continue to page 7.**

You will tune the TV to its video input to watch the VCR.

Set the Auto TV/VCR feature to OFF. See page 10.

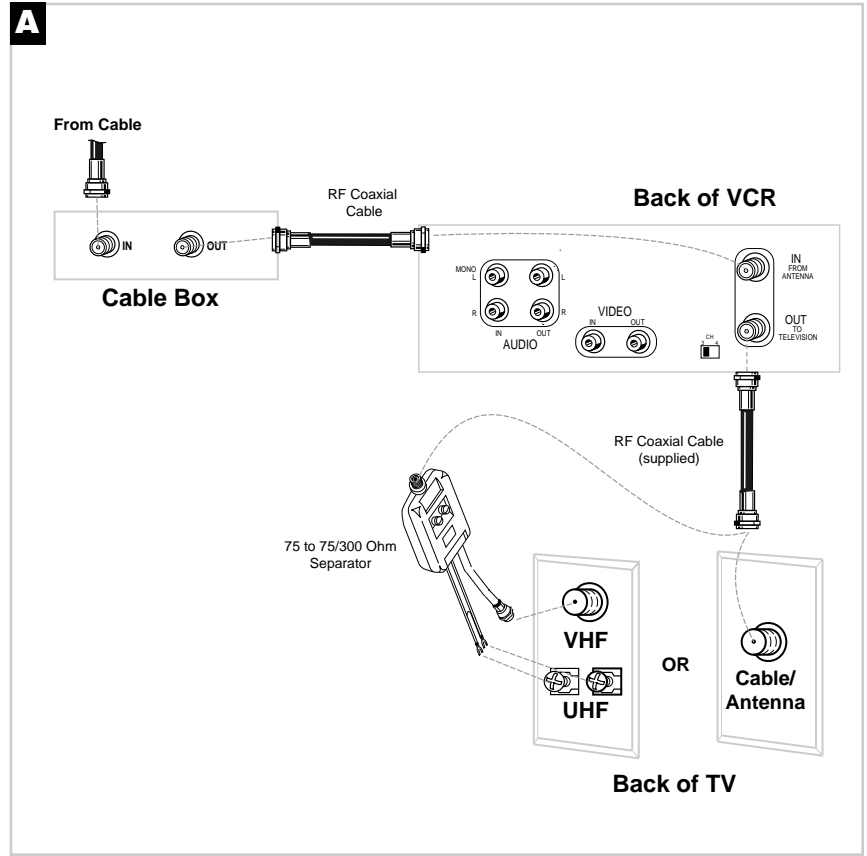


# Cable System With Cable Box to Unscramble All Channels

## A. Basic hookup.

Use this hookup for a simple connection which requires fewer accessories.

1. Set the **CH3 CH4** switch on back of VCR to either channel 3 or 4.  
You will tune the TV to this channel and use the **TV•VCR** button to watch the VCR.
2. Connect as shown.  
This connection may require additional accessories not provided.
3. Plug in power cords of VCR, TV, and cable box.
4. **Continue to page 7.**



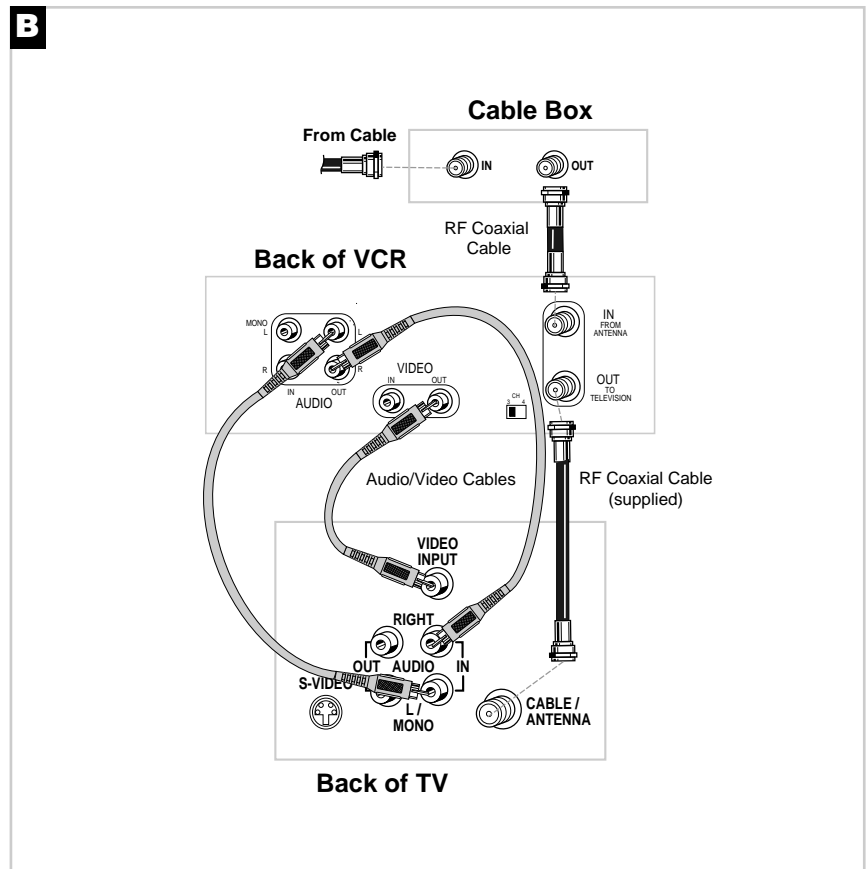
## B. Advanced hookup.

Use this hookup for slightly improved picture quality, hi-fi stereo sound, and more convenient operation — use of **TV•VCR** button not required.

1. Connect as shown.  
This connection requires additional accessories not provided.  
If your TV is not stereo, you may need a Y-adapter to hear sound from both left and right channels.
2. Plug in power cords of VCR, TV, and cable box.
3. **Continue to page 7.**

You will tune the TV to its video input to watch the VCR.  
Set the Auto TV/VCR feature to OFF. See page 10.

**Caution:** The unauthorized recording of satellite broadcasts, television programs, or other materials may infringe the rights of others.



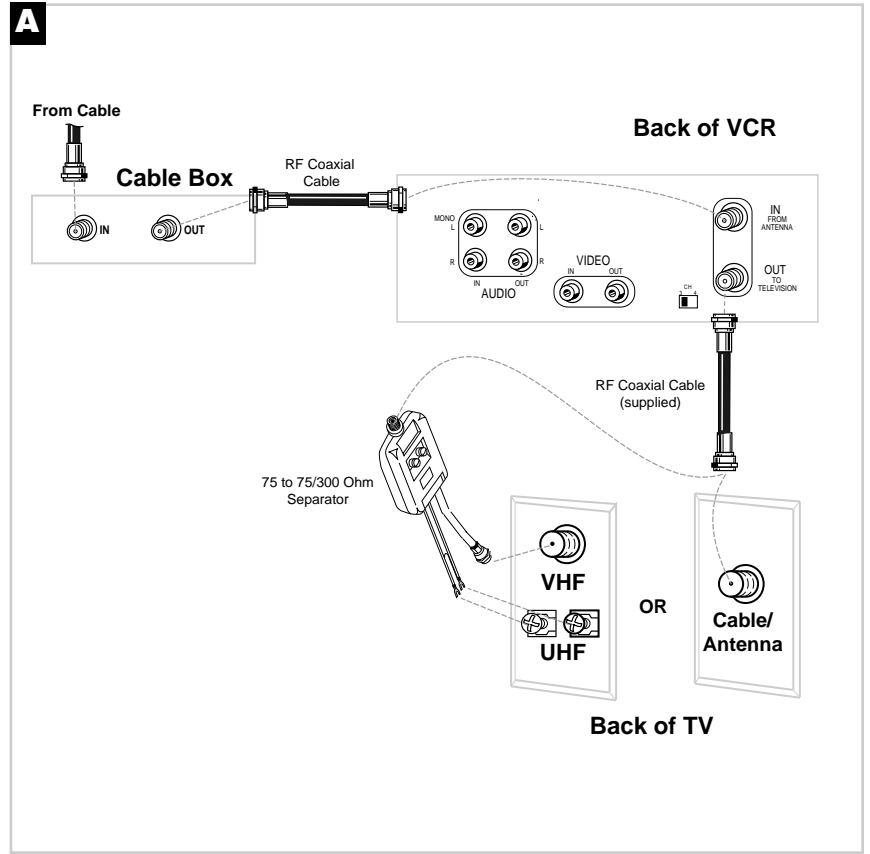
# Cable System With Cable Box to Unscramble Pay Channels

(such as HBO, Showtime, Pay-Per-View, etc.)

## A. Basic hookup.

Use this hookup for a simple connection which requires fewer accessories.

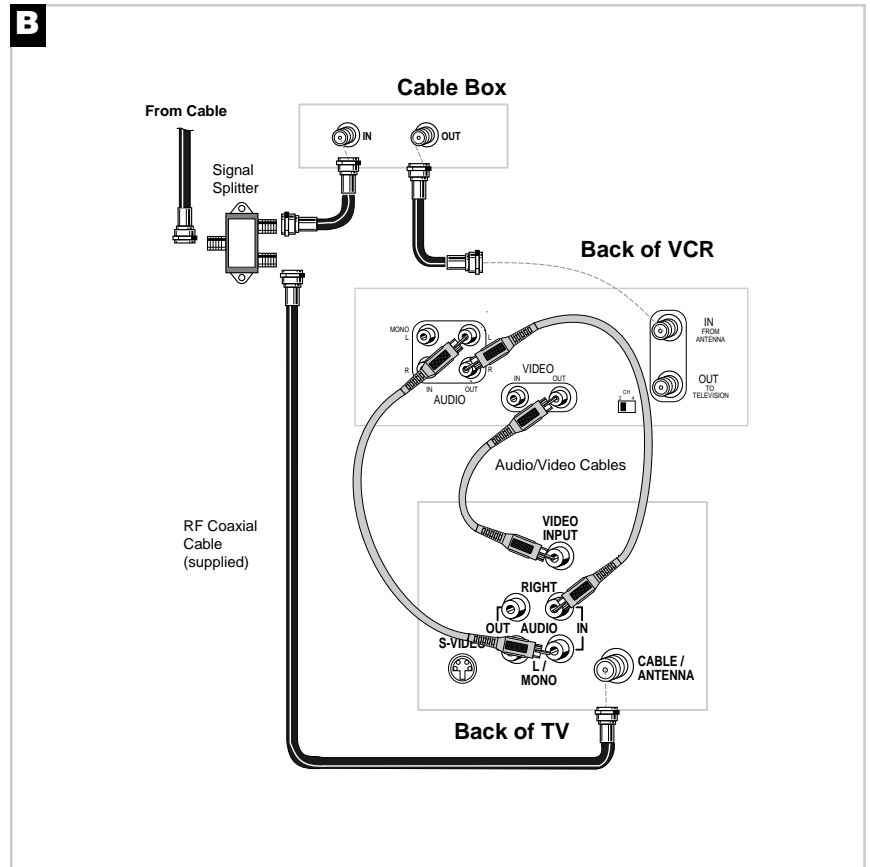
1. Set the **CH3 CH4** switch on back of VCR to either channel 3 or 4.  
You will tune the TV to this channel and use the TV•VCR button to watch the VCR.
2. **Connect as shown.**  
This connection may require additional accessories not provided.
3. **Plug in power cords of VCR, TV, and cable box.**
4. **Continue to page 7.**



## B. Advanced hookup.

Use this hookup for slightly improved picture quality, hi-fi stereo sound, and more convenient operation — use of TV•VCR button not required.

1. **Connect as shown.**  
This connection requires additional accessories not provided.  
If your TV is not stereo, you may need a Y-adaptor to hear sound from both left and right channels.
2. **Plug in power cords of VCR, TV, and cable box.**
3. **Continue to page 7.**  
You will tune the TV to its video input to watch the VCR. All pay channels are viewed through the VCR.  
Set the Auto TV/VCR feature to OFF. See page 10.

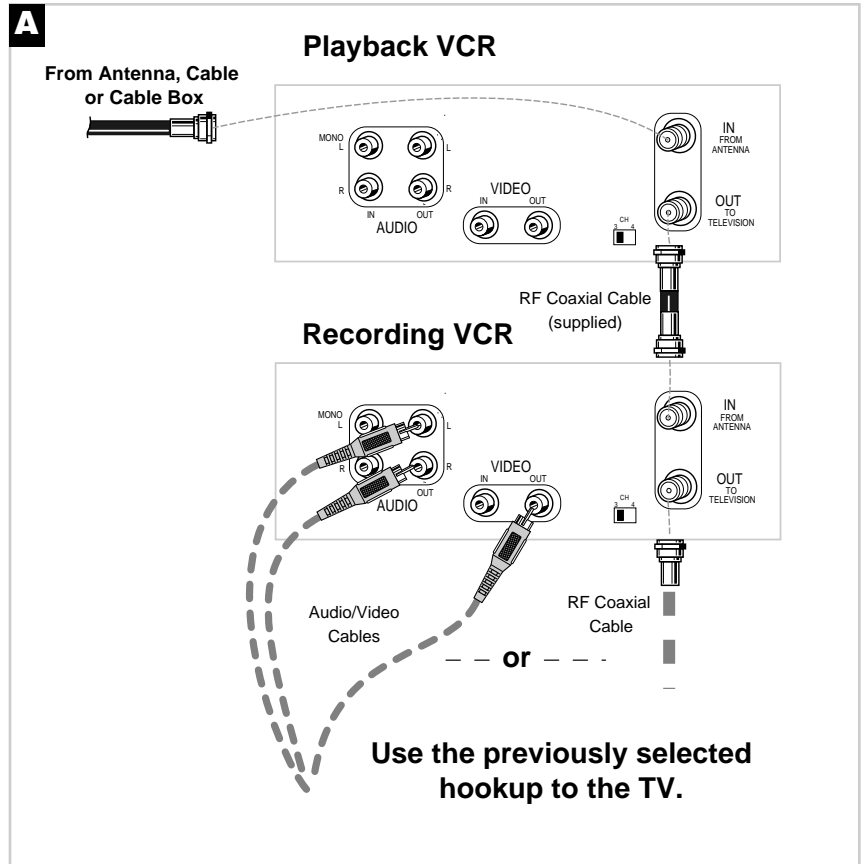


# Connecting Two VCRs for Copying Tapes

## Option A hookup.

Use this hookup for a simple connection which requires fewer accessories.

1. Select a hookup from pages 2 through 5 and then modify with this connection.
  2. Set the CH3 CH4 switch on the playback VCR to either channel 3 or 4.  
You will tune the recording VCR to this channel to receive the signal from the playback VCR.
  3. Connect as shown.
- This connection may require additional accessories not provided.
4. Plug in power cords of VCRs and TV.
  5. **Continue to page 7.**



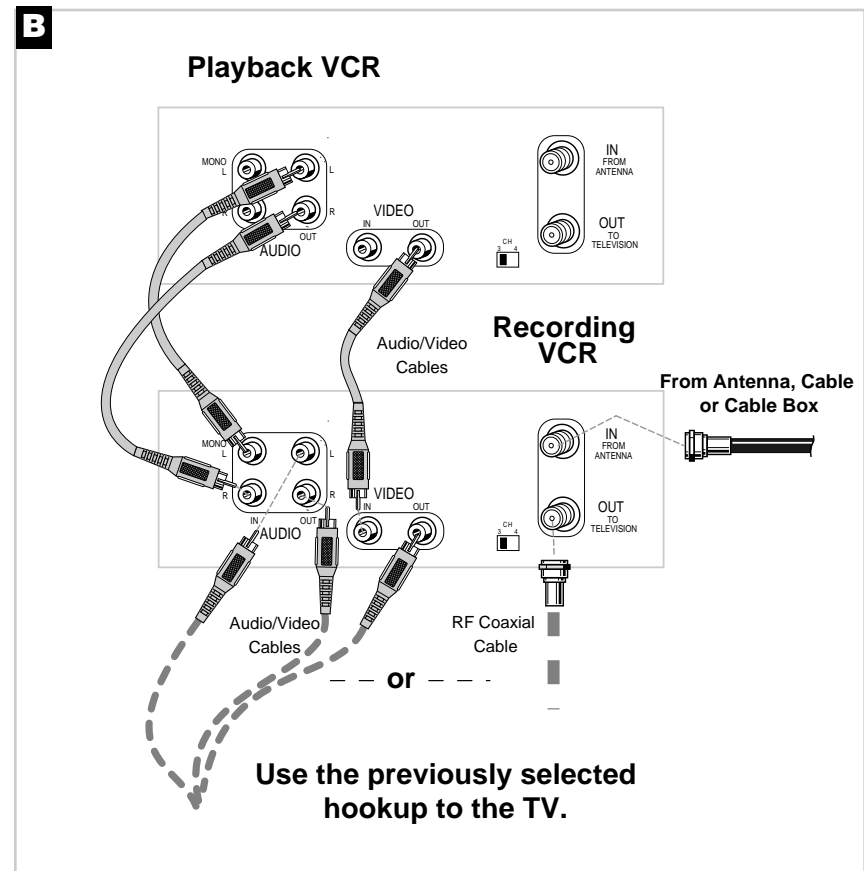
## Option B hookup.

Use this hookup for slightly improved copy quality, hi-fi stereo sound, and more convenient operation — use of TV•VCR button not required.

1. Select a hookup from pages 2 through 5 and then modify with this connection.
  2. Connect as shown.
- This connection requires additional accessories not provided.
- If your other VCR is not stereo, plug it into the AUDIO L (MONO) jack of this VCR to hear sound from both left and right channels.
3. Plug in power cords of VCRs and TV.
  4. **Continue to page 7.**

You will select the line (audio/video) input on the recording VCR to receive the signal from the playback VCR.

**Caution:** The unauthorized recording of satellite broadcasts, television programs, or other materials may infringe the rights of others.

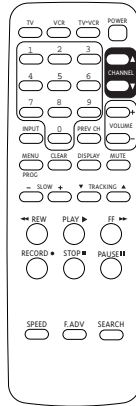




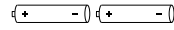
# Startup

## 1. Check accessories with VCR.

Contact your dealer if any items are missing.



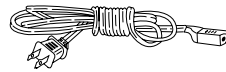
Remote  
(Stock No. 233583)



2 "AAA" Batteries

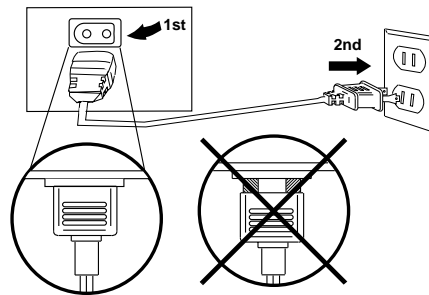


RF Coaxial Cable  
(Stock No. 221396)

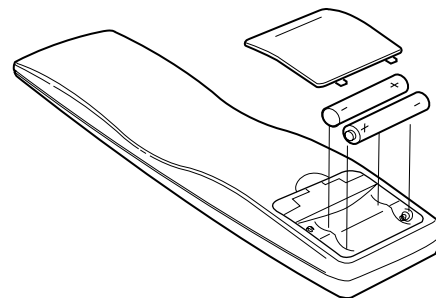
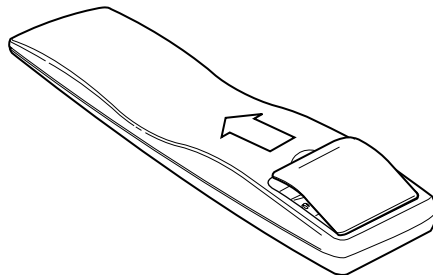


Power Cord  
(Stock No. 218104)

## 2. Attach power cord to back of VCR.



## 3. Insert batteries in remote.



# Startup

## 4. Turn on the TV.

- A. Turn on the TV.
- B. If you used one of the basic hookups, tune the TV to the channel selected with the CH3 CH4 switch on back of VCR.

If you used one of the advanced hookups, tune the TV to the TV's video input. (See TV owner's manual for details.)

## 5. Turn on the VCR.

- A. Press VCR on the remote.

## 6. Place channels in the VCR's memory.

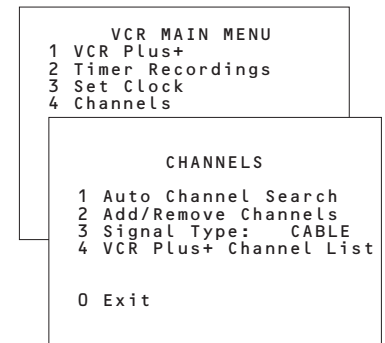
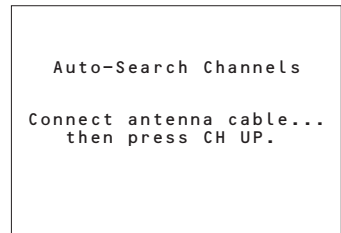
The first time you turn on the VCR or after a power interruption, the VCR will display a message on the TV screen prompting you to Auto-Search Channels for the VCR. If the message does not appear, go to step A below. If the message appears, follow the directions on the screen.

Wait until the channel numbers stop changing. This takes about one to two minutes. The TV will then tune to the lowest channel found. Pressing CHANNEL up or down will select only the active channels.

If you ever need to manually Auto-Search Channels because you change cable or antenna signals:

- A. Press MENU to display the VCR MAIN MENU on the TV screen. If this menu does not appear:
  - Make sure TV is tuned to same channel as the CH3 CH4 switch on the back of the VCR or the TV's video input (refer to TV's manual).
  - Press VCR, then press MENU again.
  - If you use a basic hookup, check VCR indicator in display panel – it should be on. Press TV•VCR to turn it on.
  - Check the connections.
- B. Press 4 to display the CHANNELS menu.
- C. Press 1 to begin Auto Channel Search.

The VCR automatically selects CABLE (cable TV) or ANTENNA. If you need to change the setting manually, press 3.



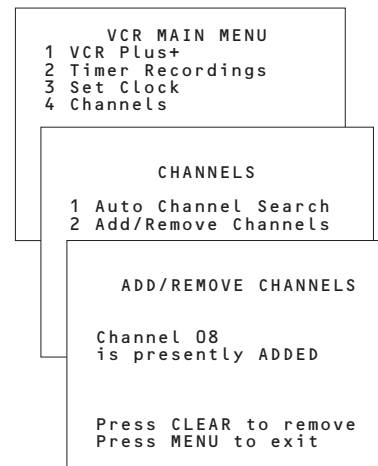
## Startup

### 7. Add or remove channels from the VCR's memory.

You may want to add or remove channels if some of the channels are not active, have weak signals, or you do not want to watch them.

We recommend channels be placed in memory using the Auto Channel Search feature *described on the previous page* before adding or removing channels. Channels 2-13 and L1 were placed in memory at the factory.

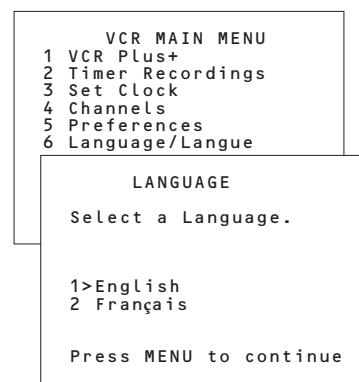
- Press VCR on the remote.
- Press MENU on the remote to see the VCR MAIN MENU on the TV screen.
- Press 4 to display the CHANNELS menu.
- Press 2 to display the ADD/REMOVE CHANNELS menu.
- Follow the directions on the screen.
- Add or remove more channels by entering channel numbers or using CHANNEL up or down.



### 8. Select a language./Choisissez une langue.

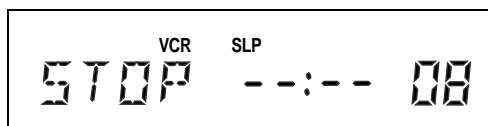
You can select the language for the displays on the VCR.

- Press MENU on the remote to see the VCR MAIN MENU on the TV screen.
- Press 6 to display the LANGUAGE menu.
- Select English or French.
  - Press 1 to select English.
  - Press 2 to select Français.

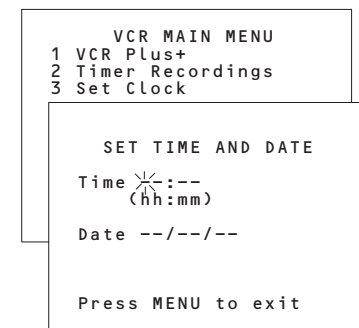


### 9. Set the time and date.

When you first turn on the VCR, --:-- appears in the clock area of the VCR's display panel.



- Press MENU on remote to display the VCR MAIN MENU on the TV screen.
- Press 3 to display SET TIME AND DATE.
- Enter the time and date with the number buttons on the remote.
  - Press 0 before single-digit numbers.  
Example: press 0, then 5, then 0, then 7 for a time of 5:07. Press 1 for AM or 2 for PM.
  - Press CLEAR on the remote to change incorrect entries.
- Press MENU on remote to remove SET TIME AND DATE from the TV screen and start the clock. The time will appear in the VCR's display panel and the time and date will appear on the TV screen when you press DISPLAY.



continued on next page

## Startup

### 10. Use TV•VCR button.

**Skip this step if you used one of the advanced hookups.**

When using one of the basic hookups, the TV•VCR button lets you switch between the picture coming from the VCR or the picture from the TV channel. This button lets you record a program on the VCR while watching another channel on the TV. *Details are on page 21.*

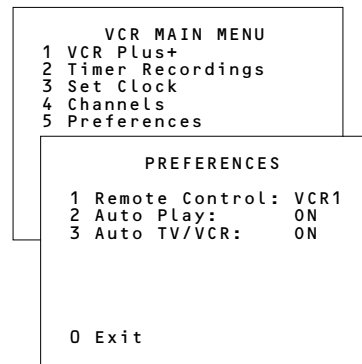
- A. Press VCR to set the remote to control the VCR.
- B. Press TV•VCR to see the picture from the VCR.  
The VCR indicator lights in the display panel.
- C. Press CHANNEL up or down to change channels on the VCR.  
The channel number changes in the display panel.
- D. Press TV•VCR to see the TV channels.  
The VCR indicator does not light in the display panel. Change channels using the TV's remote.
- E. Return the TV to the VCR viewing channel — CH3 or CH4.
- F. Press VCR, then TV•VCR to switch back to the picture from the VCR.

### 11. Set Auto TV/VCR feature.

If you used one of the basic hookups and did not connect the audio/video jacks of the VCR to the TV, leave the Auto TV/VCR feature set to ON.

If you have connected your VCR using the audio/video input of your TV, you can prevent the VCR indicator from turning on automatically and interrupting the cable or antenna signal to your TV.

- A. Press MENU on the remote to see VCR MAIN MENU on the TV screen.
- B. Press 5 to display PREFERENCES.
- C. Press 3 to select Auto TV/VCR: ON or OFF.
  - Select ON if you used one of the basic hookups and watch the VCR on channel 3 or 4 of your TV. The VCR will automatically switch the TV•VCR setting to VCR every time the VCR is turned on, a tape with the safety tab removed is inserted, or you press PLAY.
  - Select OFF if you used one of the advanced hookups and watch your VCR on the video input channel of your TV. The VCR indicator will not turn on automatically and the signal from your antenna or cable to your TV will not be interrupted. Pressing TV•VCR on the remote will still turn the VCR indicator on or off and switch the antenna system.



## Controlling a TV

The VCR's remote is preprogrammed to control the basic functions of a compatible RCA, ProScan, or GE TV. The remote can also be set up to control other manufacturer's brands. To program the remote, use the remote buttons that correspond to your brand.

### Program the Remote for a TV

1. Turn on the TV.
2. Point the VCR's remote at the TV.
3. Hold the TV button and press two number buttons for your brand. If the TV changes channels when the CHAN up or down button is pressed, set up is complete.
4. Release the buttons.
5. Repeat steps 2 – 4 with two other buttons if the first ones do not work.

**Helpful Hint:** Notice the difference between the TV and VCR on-screen displays. This is one way to tell if the remote is set to control the VCR or the TV.

Brand *	Remote Code	Brand *	Remote Code
Akai	03	NAD	07
AOC	06	NEC	06
Candle	06	Panasonic	04,11
Citizen	06	Philco	04,06
Colortyme	06	Philips	03,04,06
Concerto	06	Pioneer	06
Curtis Mathes	01,06	Portland	06
Daewoo	06	ProScan	01
Daytron	06	Proton	06
Electrohome	06	Quasar	11
Emerson	06	Radio Shack	01,05,13
Envision	05,06	RCA	01,06
Fisher	05,08	Realistic	05
GE	00,01,06,11	Sampo	06
Goldstar	06	Samsung	06,09
Hallmark	06	Sanyo	05,08
Hitachi	06	Sears	01,05,06,07,08,10,
Infinity	04		
J C Penney	00,01,06,09	Sharp	06,13
JBL	04	Sony	03
Jensen	06	Soundesign	06
JVC	10,11	Sylvania	04,06
Kawasho	03,06	Technics	11
Kenwood	06	Techwood	06
Loewe	04	Teknika	06
Luxman	06	TMK	06
LXI	04,05,07	Toshiba	05,07,09
Magnavox	04,06	Universal	00
Marants	04	Victor	10
Marantz	04,06,12	Wards	00,01,04,06,
MGA	06		13
Mitsubishi	06,12	Zenith	02
MTC	06		

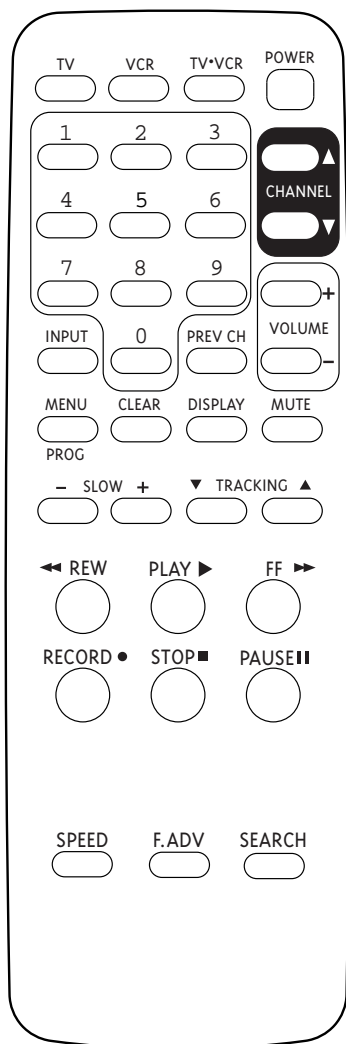
\* The remote may not be able to control every model TV of the brands listed.

### Operate the TV

After you have set up your remote to control your TV, test the TV buttons to see which ones operate your TV.

1. Point the remote at the TV and press TV.
2. If TV does not turn on in step 1, press TV and then POWER.
3. Use the "TV Function Buttons" as described on page 13.

# Buttons



## Component Buttons

Press one of the buttons to set the remote to operate that component.

### TV

Turns on a compatible RCA, ProScan, or GE TV and sets the remote to control the TV.

Used with POWER button to turn on another brand of TV, other than RCA, when the remote is programmed to control that TV. See page 11.

### VCR

Turns on a compatible RCA, ProScan, or GE VCR and sets remote to control the VCR.

## VCR Function Buttons

Press VCR to set remote to control the VCR to use the function buttons.

### CHANNEL Up or Down

Selects next higher or lower channel in the VCR's channel memory.

### CLEAR

Resets time counter to 0:00:00.

Allows you to change entries when setting the clock or VCR for a VCR Plus+ or timer recording.

### DISPLAY

Shows VCR operating displays on the TV screen.

Displays the time counter.

### F.ADV (Frame Advance)

Lets you view one frame with each press of the button while the tape is paused.

### FF (Fast Forward)

Fast forwards the tape when the VCR is stopped.

Searches the picture in forward motion during playback.

### INPUT

Turns the line input on or off. L1 appears in VCR's display panel and VIDEO appears on TV screen.

Line input refers to the signal coming from the component connected to the audio/video input jacks on the back.

### MENU PROG

Displays the VCR MAIN MENU on the TV screen.

Removes a menu from the screen.

Used to program the VCR.

### Numbers (0 through 9)

Select a channel up to 99 by pressing two numbers.

Select a cable channel over 99 by pressing and holding 1 until 1-- appears on the screen. Then press the other two numbers.

### PAUSE

Pauses action for viewing during playback.

Pauses recording to prevent recording of unwanted scenes.

### PLAY

Plays a tape.

### POWER

Turns off VCR when remote is set to control the VCR.

### PREV CH (Previous Channel)

Switches between two channels.

Select one channel and then use the number buttons to select another. Press PREV CH to switch between the two channels.

## Buttons

### VCR Function Buttons

(continued)

#### **RECORD**

Starts VCR recording.

Used for express recording (XPR).  
*See page 27.*

#### **REW (Rewind)**

Rewinds the tape when the VCR is stopped.

Searches the picture in reverse motion during playback.

#### **SEARCH**

Displays INDEX, GO-TO, and BLANK SEARCH menus on TV.

Lets you advance tape 60 or 120 seconds during playback.

#### **SLOW - / +**

Used for slow-motion playback.

#### **SPEED (Tape Speed)**

Selects a recording speed (SP, LP, or SLP).

#### **STOP**

Stops the normal functions such as record, playback, rewind, fast forward, and pause.

#### **TRACKING Up and Down**

Lets you manually reduce the streaks that may appear on the picture during play or pause.

Reduces picture "jitter" during stop-action playback.

#### **TV•VCR**

Switches the picture signal so that it either comes from the VCR or the TV channel. *See page 10.*

### TV Function Buttons

Press the TV button to set remote to control a compatible TV. Some buttons may not work with every TV.

#### **CHANNEL Up or Down**

Selects next higher or lower channel in the TV's channel memory when remote is set to control a TV.

#### **CLEAR**

Removes menus or status displays from the screen.

#### **DISPLAY**

Shows the status displays on the screen.

Removes menus or displays from the screen.

#### **MUTE**

Turns the TV sound on or off.

#### **Numbers (0 through 9)**

Select a channel up to 99 by pressing two numbers.

Select a cable channel over 99 by pressing and holding 1 until 1-- appears on the screen. Then press the other two numbers.

#### **POWER**

Turns off a compatible TV when remote is set to control TV.

Used with TV button to turn on a compatible TV, other than RCA, when the remote is programmed to control that TV. *See page 11.*

#### **PREV CH (Previous Channel)**

Switches between two channels.

Select one channel and then use the number buttons to select another. Press PREV CH to switch between the two channels.

Works as an ENTER key on some TVs.

#### **SLOW - / +**

Used with the TV's menus to select and adjust features.


#### **VOLUME Up and Down**

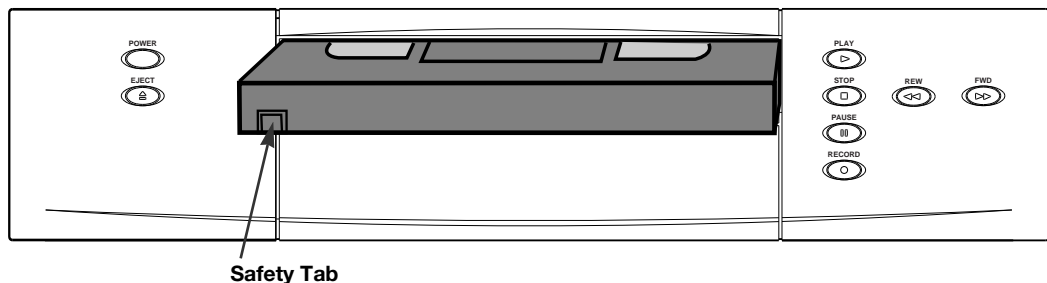
Raises and lowers sound.

# Operating Instructions

## To Play a Tape

1. Turn on the TV and tune it to channel 3, 4, or TV's video input to see the picture from the VCR.
2. Insert a tape in the VCR.

VCR automatically turns on. The cassette-in  indicator lights, and the VCR indicator lights if the Auto TV/VCR feature is set to ON. The tape automatically begins playback if the safety tab on the cassette has been removed and the auto play feature is turned on.



3. Press PLAY, if necessary. PLAY appears in the VCR's display panel.
4. Press TRACKING up or down to remove any streaks from the picture, if necessary. *Details are on page 17.*
5. Press STOP.
6. Press REW. REW will appear in the VCR's display panel.  
The VCR will automatically rewind the tape if it reaches the end of the tape during playback. While rewinding, you can press POWER and the VCR will turn off after rewinding.
7. Press EJECT on the VCR to eject the tape once it is completely rewound.



# Using the Playback Features

## Tape Playback: HI-FI/LINEAR/MIX Feature

The VCR records the same audio on both the Hi-Fi and linear tracks on the tape. The Hi-Fi sound is recorded on separate left and right stereo channels. Monaural sound is recorded on the linear track.

To enjoy Hi-Fi sound, connect your VCR to a stereo television or amplifier/receiver using the audio/video jacks. The Tape Playback: HI-FI/LINEAR/MIX feature lets you select which audio you play back.

### To Select Playback Sound

1. Press MENU to see the VCR MAIN MENU on the TV screen.
2. Press 7 to see the AUDIO menu on the TV screen.
3. Press 2 to switch between HI-FI, LINEAR, or MIX sound.

- Select HI-FI to play back sound recorded on the Hi-Fi track and for normal use.

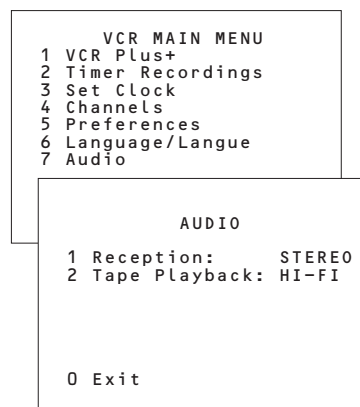
The HIFI indicator lights in the VCR's display panel when you play back hi-fi.

- Select LINEAR to play back the sound recorded on the linear monaural track, such as a second audio program (SAP).

The HIFI indicator turns off in the VCR's display panel.

- Select MIX to play back the sound recorded on both the linear track and the Hi-Fi track, sound-on-sound.

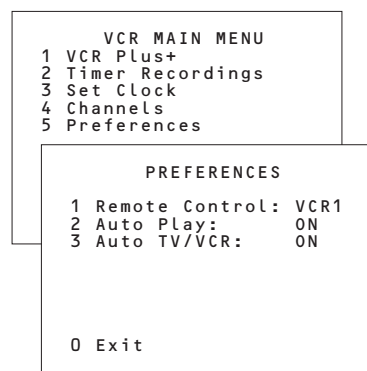
The HIFI indicator turns off in the VCR's display panel.



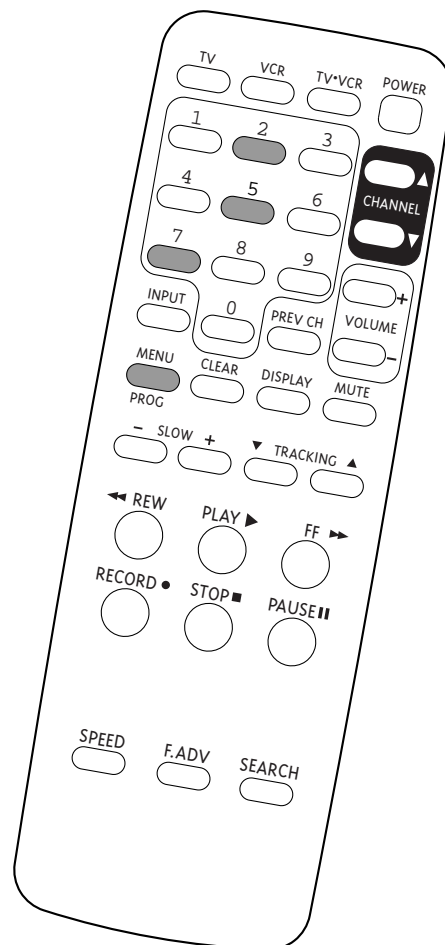
## Auto Play Feature

This feature lets you tell the VCR whether you want it to automatically start playing a tape that is inserted with the safety tab removed.

1. Press MENU on the remote to see the VCR MAIN MENU on the TV screen.
2. Press 5 to display the PREFERENCES menu.



3. Press 2 to select Auto Play: ON or OFF.
  - Select ON to have a tape with its safety tab removed start playing automatically.
  - Select OFF if you do not want a tape with its safety tab removed to start playing automatically.



## Using the Playback Features

### Pause for Stop Action

This feature stops the tape in action and allows you to examine the details of the scene. Stop action works best for tapes recorded in the SP and SLP speed.

1. Press PAUSE during playback to stop the action.  
STILL appears in the VCR's display panel.
2. Press TRACKING up or down to reduce any jittering of the picture.
3. Press PAUSE or PLAY to return to playback.  
The VCR will automatically switch from stop-action playback to stop after a few minutes.

### Picture Search

You can search a picture during playback by fast forwarding or rewinding the tape. Sound is turned off during picture search. Picture search works best for tapes recorded in the SP or SLP speed.

#### Fast Forward Search

1. During playback, press FF on the remote or FWD on the VCR to search forward at a faster-than-normal speed.  
SRCH+ appears in the VCR's display panel.
2. To return to playback, press FF on the remote, FWD on the VCR, or PLAY.

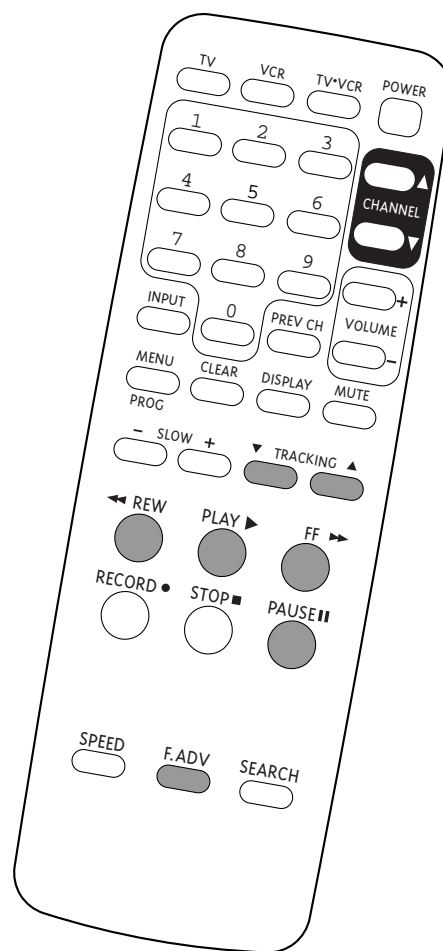
#### Rewind Search

1. During playback, press REW to search in reverse at a faster-than-normal speed.  
SRCH- appears in the VCR's display panel.
2. To return to playback, press REW or PLAY.

### Frame Advance

Frame advance lets you view one stop-action frame after another. Frame advance works best for tapes recorded in the SP or SLP speed.

1. Press PAUSE to stop the action.
2. Press F.ADV each time you want to view a frame of the scene.
3. Press PAUSE or PLAY to resume normal playback.



## Using the Playback Features

### Slow Motion

You can view the picture in slow motion during play or play pause. SLOW – and + allow you to change the speed. Sound is turned off during slow-motion playback. Slow motion works best in the SP or SLP speed.

1. During playback, press SLOW + or – to start slow-motion playback.

SLOW appears in the VCR's display panel.

2. Press SLOW + to increase the speed or – to decrease the speed.
3. Use TRACKING up or down to remove any streaks from the picture.
4. Press PLAY to return to playback.

The VCR will automatically switch from slow-motion playback to stop after a few minutes.

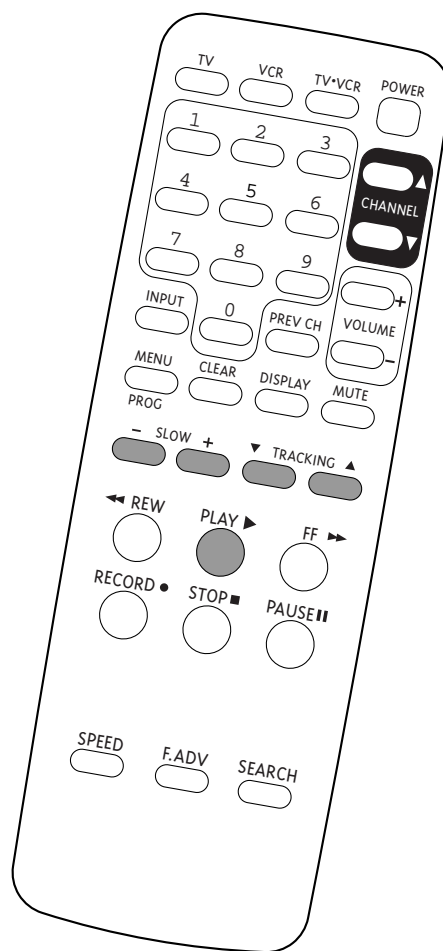
### Automatic Tracking

The VCR has automatic tracking which adjusts the picture when playing back a tape recorded on another VCR. Automatic tracking is turned on whenever a tape is inserted or the VCR's power is turned on.

### Manual Tracking

Occasionally, you may need to manually adjust tracking on a tape recorded on a different VCR or camcorder. The TRACKING buttons on the remote or VCR are used when playing a tape. They have no effect during recording.

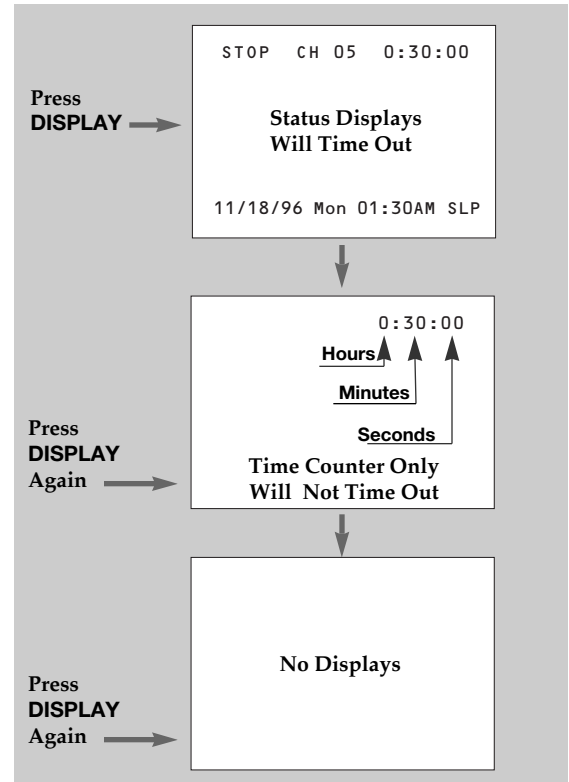
- When streaks or snow appear, press TRACKING up or down for the best possible picture.
- Press TRACKING up or down during stop-action pause to reduce picture "jitter".
- Press both TRACKING buttons at the same time to turn automatic tracking back on or eject the tape and re-insert it.



# Using the Playback Features

## DISPLAY Button

1. Press DISPLAY to display the status of the VCR, channel number, time counter, date, time, and tape speed on the TV screen. The time will appear in the display panel.  
The time and date must be set before they are displayed. If you do not press DISPLAY again, these displays will time out.
2. Press DISPLAY again to have only the time counter remain on the TV screen. The time counter will appear instead of the time in the VCR's display panel.
3. Press DISPLAY again to remove the time counter from the TV screen.  
The time counter will remain in the VCR's display panel and no status displays will appear on the TV screen. This is convenient for editing or copying tapes.
4. Press DISPLAY again to return to the normal status displays.  
The time will appear in the VCR's display panel.  
Turning off the VCR automatically returns the displays to normal.

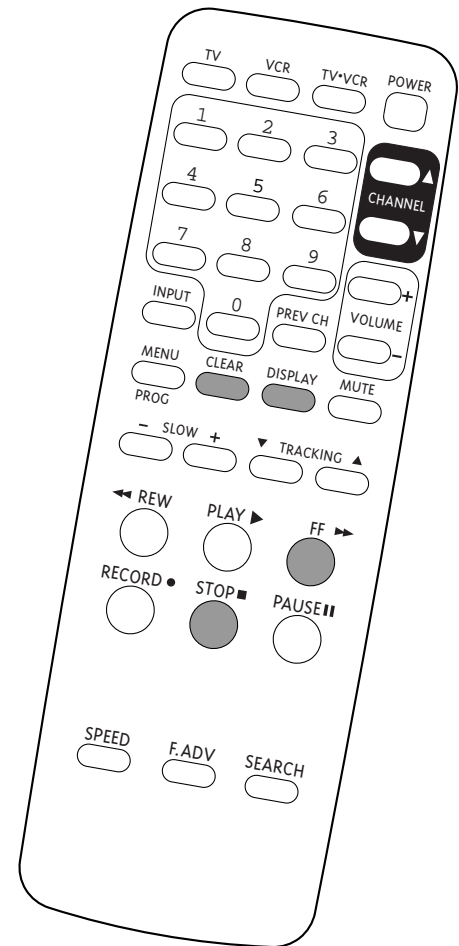


## Time Counter

The time counter shows the elapsed time it takes to record a program or play back a segment of a prerecorded tape. It helps locate the beginning or end of programs you taped. The time counter resets to 0:00:00 whenever the tape is ejected from the VCR.

For example, if a 30-minute program was recorded at the beginning of the tape, you would:

1. Insert the prerecorded tape. Make sure the tape is rewind. Press STOP.
2. Press DISPLAY twice to display only the time counter on the TV screen.
3. Press CLEAR to reset the time counter to 0:00:00.
4. Press FF on remote or FWD on the VCR to fast forward the tape until the time counter reads 0:30:00. Press STOP.  
This is the approximate end of the program and you can begin recording at this spot.
5. Press DISPLAY twice to remove the time counter from the screen and return to the normal displays.



# Using the Playback Features

## Commercial Scan (SEARCH Button)

This is useful for scanning commercials or short program segments.

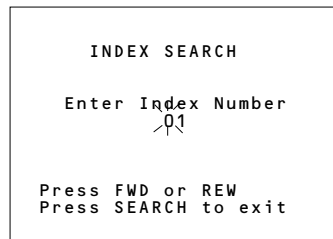
1. Press SEARCH once during playback to advance the tape approximately 60 seconds.
2. Press SEARCH twice during playback to advance the tape approximately 120 seconds.

## Index Search

The VCR has a "VHS Index Search System" that automatically records an index mark on the tape every time you begin recording a program. During playback you can locate the program you want to play by the number of index marks.

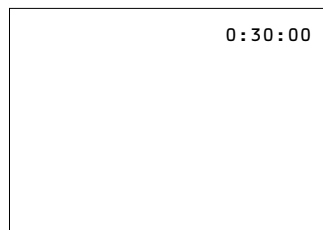
The VCR will automatically locate the index number you select. The VCR will search forward or reverse from the location you are on the tape.

1. Insert the prerecorded tape and press STOP.
2. Press SEARCH on the remote to display the INDEX SEARCH menu on the TV screen.

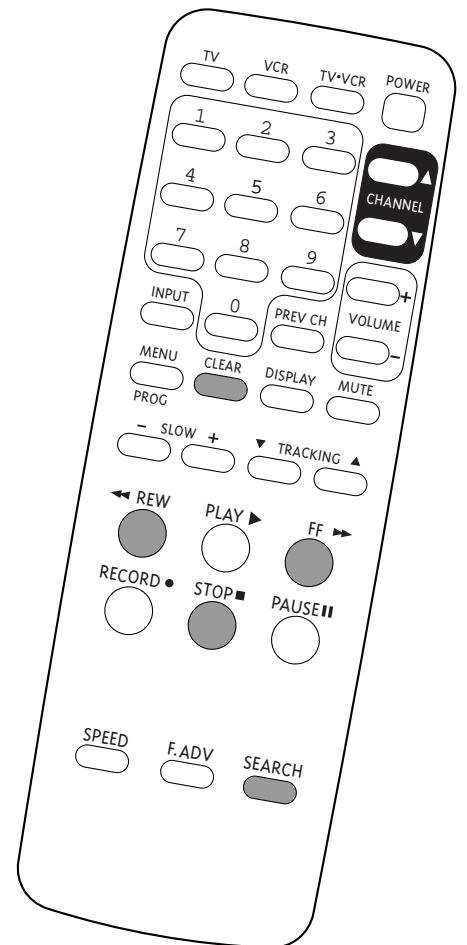


3. Press two number buttons to enter the number of index marks you want the VCR to search.  
Press CLEAR to correct an entry.
4. Press FF on remote or FWD on the VCR to search forward or press REW to search in reverse.

The time counter is displayed in the upper right corner of the TV screen during search.



5. Press STOP to stop index searching.  
Some index marks may be missed by the VCR.
  - A mark too close to your location on the tape.
  - The mark at the beginning of a recorded segment of five minutes or less.
  - The first index mark on the tape when you start at the beginning of the tape.

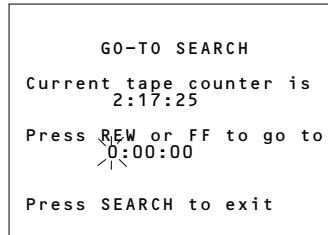


# Using the Playback Features

## Go-To Search

The go-to search feature allows you to locate a counter reading on the tape and automatically begins playing back the tape.

1. Insert the prerecorded tape and press STOP.
2. Press SEARCH on the remote twice to display the GO-TO SEARCH menu on the TV screen.

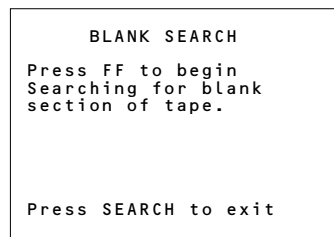


3. Press number buttons to enter the hour(s) and minute(s) of the time counter reading you want the VCR to search.  
Press CLEAR to correct an entry.
4. Press FF on the remote or FWD on the VCR to search forward or REW to search in reverse.  
The time counter is displayed in the upper right corner of the TV screen during search.
5. Press STOP to stop go-to searching.

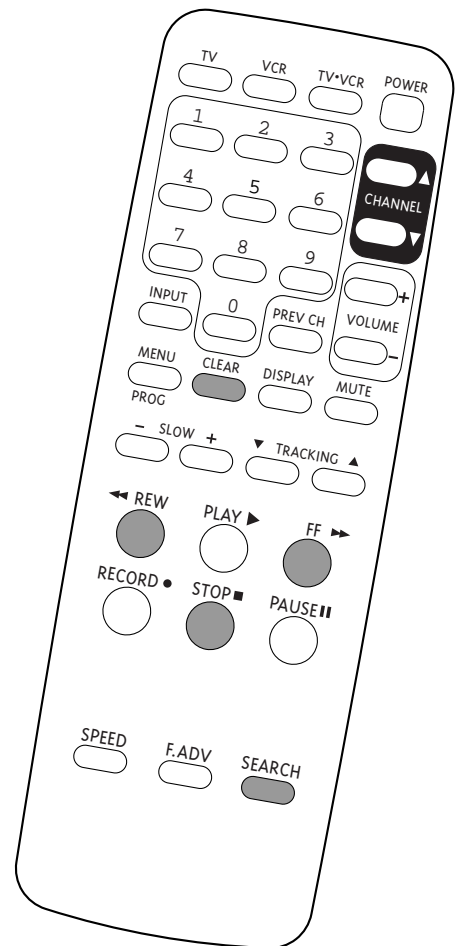
## Blank Search

The VCR searches for blank portions of the tape that are more than six seconds in length.

1. Insert the tape and press STOP.
2. Press SEARCH on the remote three times to display the BLANK SEARCH menu on the TV screen.



3. Press FF to begin searching for six seconds of blank tape. A message appears on the screen if a blank area is not found.
4. Press STOP to stop blank searching.



## Types of Recordings

Your VCR provides different types of recording. These types are explained in the following sections:

- Basic Recording – Operating Instructions
- Express (XPR) Recording
- Recording While You're Away
- Recording Broadcast Stereo TV or SAP (Second Audio Program)
- VCR Plus+ Recording
- Recording Audio Only
- Timer Recording
- Using Two VCRs for Copying Tapes

## Recording Speeds

Press **SPEED** on the remote to select a recording speed (SP, LP, or SLP). The speed you select appears on the TV screen and in the VCR's display panel. The VCR automatically selects the playback speed (SP, LP, or SLP).

**SP (Standard Play)** gives the best quality recording. That is why most prerecorded, rental tapes are recorded in SP. Fewer programs can be recorded on the tape. Special effects such as pause, slow motion, picture search, and frame advance work well.

Cassette Type	Recording Time		
	SP	LP	SLP
T120	2Hr	4Hr	6Hr
T160	2Hr 40Min	5Hr 20Min	8Hr

**LP (Long Play)** gives twice the recording time of tapes recorded in SP. Special effects in playback are not recommended in LP.

**SLP (Super Long Play)** gives three times the recording time of tapes recorded in SP. Special effects such as pause, slow motion, picture search, and frame advance work well.

## Recording Pause

This feature allows you to prevent recording short passages of unwanted material.


Press **PAUSE** during recording to stop and start recording. **REC P** appears in the VCR's display panel.

The VCR will automatically switch from pause to stop after a few minutes.

## Basic Recording – Operating Instructions

### To Make a Recording

Turn on the TV and tune it to the VCR viewing channel, either 3, 4, or TV's video input channel.

1. Insert a tape with safety tab in place.  
The cassette-in indicator  lights in the VCR's display panel.
2. Press **VCR** to set remote to control VCR.
3. If using one of the basic hookups, make sure the VCR indicator appears in the VCR's display panel. If not, press **TV•VCR** to turn it on.
4. Select recording speed using **SPEED** on the remote.  
The tape speed indicator appears in the VCR's display panel and on the TV screen.
5. Select the channel to be recorded.  
The channel number appears in the VCR's display panel and on the TV screen.
6. Press **RECORD** to begin recording. **REC** appears in the VCR's display panel while the VCR is recording.

### Watch a TV Channel While VCR is Recording a Different Channel

1. Follow steps 1 through 6 above.
2. If using one of the basic hookups, press **TV•VCR** to switch to the TV channel. The VCR indicator will turn off in the display panel.
3. Press **TV** to set the remote to control TV functions for a compatible TV.
4. Select the channel you want to watch with the TV's channel buttons.
5. Press **STOP** when recording is finished.

# Recording While You're Away (VCR Plus+\* Recording)

## VCR Plus+ Setup for Antenna or Unscrambled Cable Systems (Not Requiring a Cable Box)

A VCR Plus+ channel number is assigned for each broadcast or cable channel. These numbers are listed in most publications that list PlusCode\* numbers.

1. Prepare the worksheet on the opposing page for the VCR Plus+ channels that are different than the channels you receive them on. Refer to the chart below for standardized VCR Plus+ channel numbers.

Broadcast or Cable-TV Station Name	VCR Plus+ Channel Number	Channel Number You Receive This Station On
HBO	33	See Note 1
ESPN	34	See Note 1
ABC	See Note 2	See Note 1
FOX	See Note 2	See Note 1

**Note 1:** Check your local or cable listing for the channel number you receive this station on.  
**Note 2:** Check your local listing for the broadcast or VCR Plus+ channel number assigned to this station.

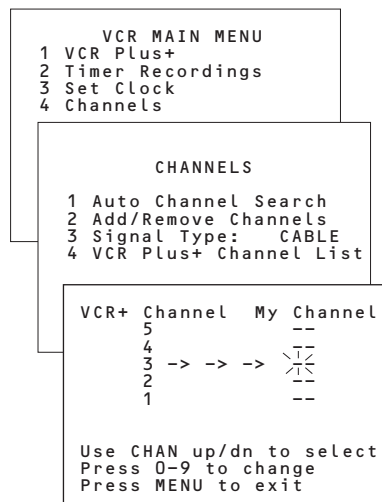
2. Press MENU on the remote to display the VCR MAIN MENU on the TV screen.
3. Press 4 to display CHANNELS menu.
4. Press 4 to display VCR Plus+ Channel List menu.
5. Using your worksheet, press two numbers to enter each channel number you receive on a different channel than the assigned VCR Plus+ channel number.

Press CHANNEL up or down to move the numbers up or down on the menu.

Press CLEAR on the remote to erase a number.

6. Press MENU when you are finished.

Auto channel search must be performed before setting the VCR Plus+ channel list.



### Standardized VCR Plus+ Channel Numbers for Cable-TV

U.S.A. List		Canadian List	
35 American Movie Classics	58 The Movie Channel	67 Allarcom Pay Television/Superchannel	65 MeteoMedia/The Weather Network
39 Arts & Entertainment	48 Music Television	44 Arts & Entertainment	48 MuchMusic Network
57 Black Entertainment	49 The Nashville Network	72 Cable News Network-Headline News	55 MusiquePlus
54 Bravo	38 Nickelodeon	61 Cable News Network	52 Nashville Network
42 Cable News Network	64 Nostalgia Television	70 Canadian Home Shopping Network	73 Newsworld/CBC
45 Cinemax	99 Quality Value Cable	56 Canal Famille	53 Le Reseau des Sports
98 Cinemax 2	41 Showtime	69 Cathay International Television Inc	43 The Sports Network
37 The Discovery Channel	97 Showtime 2	68 Chinavision Canada Corp	64 Super Ecran
53 The Disney Channel	59 Sports Channel	60 Country Music Television	37 Super Ecran B
63 Entertainment Television	52 Turner Network Television	63 Family Channel	98 Super Ecran C
34 ESPN Sports Network	44 USA Network	62 First Choice	66 Telatino Network
47 The Family Channel	62 Video Hits 1	96 First Choice Two	46 TV5 Montreal
33 Home Box Office	93 Viewer's Choice 1	97 First Choice Three	92 Viewer's Choice 1
95 Home Box Office 2	94 Viewer's Choice 2	99 First Choice Four	93 Viewer's Choice 2
96 Home Box Office 3	55 WGN Chicago	90 House of Commons	94 Viewer's Choice 3
51 The Learning Channel	43 WTBS Atlanta	91 La Chaîne Francaise	95 Viewer's Choice 4
46 Lifetime	60 WWOR New York	51 The Learning Channel	71 Vision TV: Canada's Faith Network
			38 Youth TV, Canada Inc

\*VCR Plus+ and PlusCode are trademarks of Gemstar Development Corporation.





## Recording While You're Away (VCR Plus+ Recording)

The VCR Plus+ and timer program features let you program the VCR to record up to eight different programs within a one year period. Before using VCR Plus+ to record a program, make sure that:

- The clock is set correctly.
- A tape with safety tab has been inserted with enough tape to record the programs.
- The remote is set to control the VCR — using VCR.
- The VCR is setup for VCR Plus+ programming.
  - If you do not use a cable box for all channels, complete VCR Plus+ setup *on pages 22-23*.

### Setting a VCR Plus+ Recording

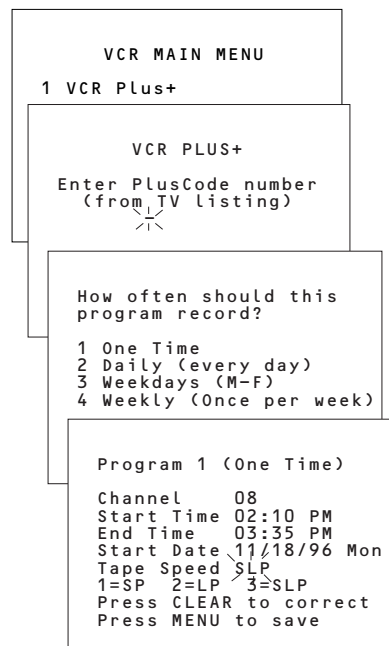
1. Press MENU on the remote to display the VCR MAIN MENU on the TV screen.
2. Press 1 to display the VCR PLUS+ menu.
3. Press numbers on the remote to enter the PlusCode number for the program you want to record. PlusCode numbers are found in most local TV listings.

Press CLEAR on the remote to correct an entry.

4. Press MENU to enter the program.

If the VCR does not recognize the PlusCode number, Unrecognized number... Please re-enter appears on the TV screen. Check the number and enter it again.

5. Press 1, 2, 3, or 4 to select type of program.
  - 1 One time – single program recorded once.
  - 2 Daily – program recorded at same time every day.
  - 3 Weekdays – program recorded at same time Monday through Friday.
  - 4 Weekly – program recorded at same time once a week.
6. To select a different recording speed from the one flashing, press 1 for SP, 2 for LP, 3 for SLP, or SPEED.
7. Press CLEAR if you want to change the program end time. This feature allows you to extend the recording time on VCR Plus+ programs. This option may be useful when recording programs such as sporting events that could go past scheduled broadcast times.
8. Press MENU to enter your program. A reminder appears which will time out. PROGRAMS OVERLAP may appear on the screen if you entered two programs where the times overlap.
9. The TIMER RECORDINGS menu appears. Press 3 to enter an additional VCR Plus+ program, or press 0 to exit.
10. **Turn off the VCR** before recording time. TIMER appears in the VCR's display panel when the timer has been programmed.
11. **If using a cable box, leave it turned on and tuned to the channel you want to record.**



### Stopping a Recording in Progress

**With the VCR:** Press POWER and then STOP within a few seconds.

**With the Remote:** Press VCR and then STOP within a few seconds.

**Note:** Timer programs will not be erased during power outages. To clear a timer program, see page 26.

## Recording While You're Away (Timer Recording)

The VCR Plus+ and timer program features let you program the VCR to record up to eight different programs within a one year period. Before setting the timer, make sure that:

- The clock is set correctly.
- A tape with safety tab has been inserted with enough tape to record the programs.
- The remote is set to control the VCR — using VCR.

### Setting a Timer Recording

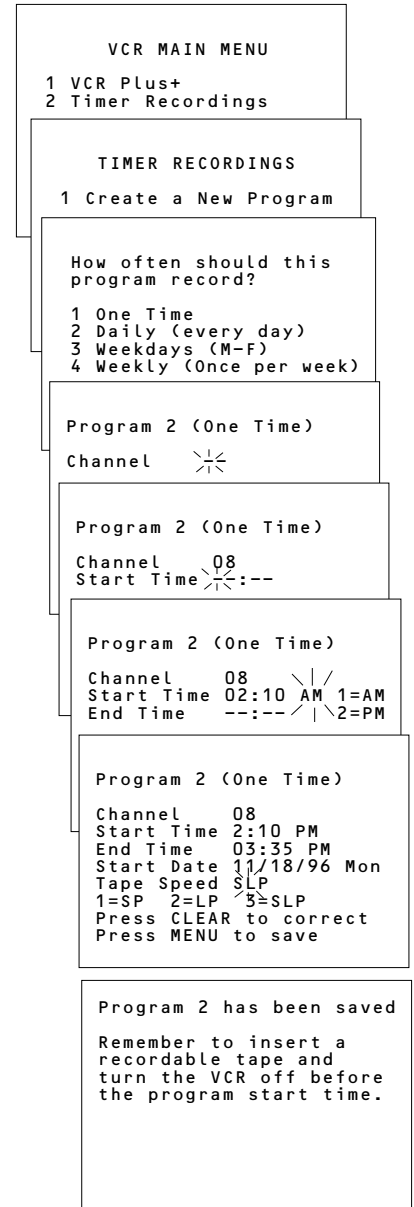
1. Press MENU on remote to display VCR MAIN MENU.
2. Press 2 to display TIMER RECORDINGS menu.
3. Press 1 to display Create a New Program menu.
4. Press 1, 2, 3, or 4 to select type of program.
  - 1 One time — single program recorded once.
  - 2 Daily — program recorded at same time every day.
  - 3 Weekdays — program recorded at same time Monday through Friday.
  - 4 Weekly — program recorded at same time once a week.
5. Press number buttons on the remote to enter the channel number (use INPUT or 0, 0 to select video input), start time including AM or PM, end time, and start date of the recording. Just follow the on-screen prompts. Press CLEAR to correct an entry.
6. To select a different recording speed from the one flashing, press 1 for SP, 2 for LP, 3 for SLP, or SPEED.
7. Press MENU to enter your program. A reminder appears which will time out or you can press MENU to return to the main menu. PROGRAMS OVERLAP may appear on the screen if you have entered two programs where the times overlap.
8. The TIMER RECORDINGS menu appears. Press 1 to enter an additional timer program, or press 0 to exit.
9. **Turn off the VCR** before recording begins. TIMER appears in the VCR's display panel when the timer has been programmed.
10. **If using a cable box, leave it turned on and tuned to the channel you want to record.**

### Stopping a Recording in Progress

**With the VCR:** Press POWER and then STOP within a few seconds.

**With the Remote:** Press VCR and then STOP within a few seconds.

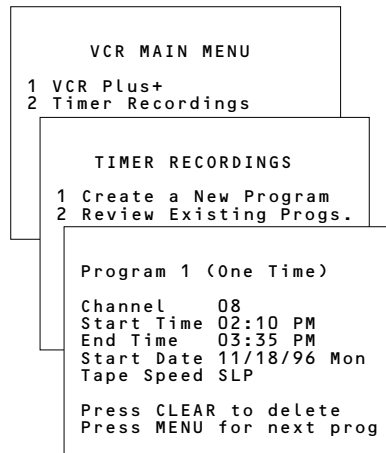
**Note:** Timer programs will not be erased during power outages. To clear a timer program, see page 26.



## Recording While You're Away

### Checking or Clearing VCR Plus+ or Timer Recordings

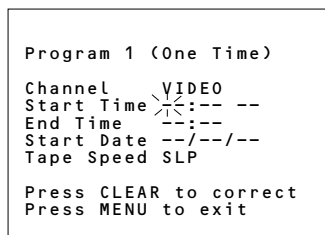
1. Press MENU on remote to display VCR MAIN MENU on TV screen.
2. Press 2 to display the TIMER RECORDINGS menu.
3. Press 2 for Review Existing Progs. feature.
4. Press MENU to display information for the next program.
5. Press CLEAR when the program you want to erase appears on the screen.



### Timer Recording From the VCR's Line Input

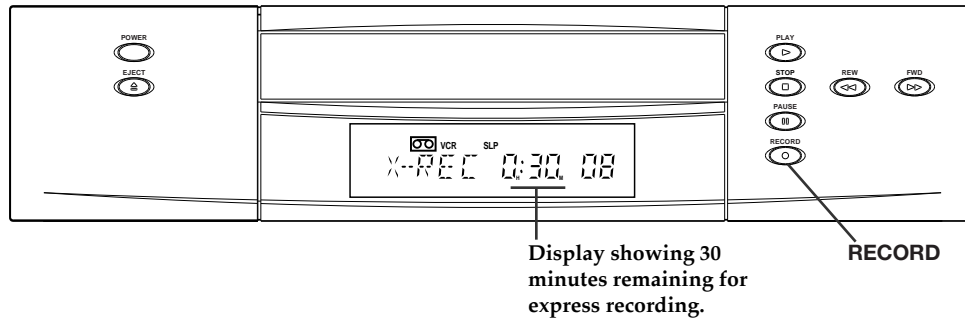
The line input refers to the signal coming from the AUDIO and VIDEO IN jacks of the VCR. Recording from the line input is convenient if you have a satellite receiver or similar component attached to these jacks. To timer record from the component connected to the VCR's line input:

Press INPUT (or 0,0) to select VIDEO in place of the channel number on the TV screen during timer programming.



# Express Recording (XPR)

Express recording lets you record up to four hours without using the timer program feature. The VCR will turn off automatically at the end of the recording.



## Operating Instructions

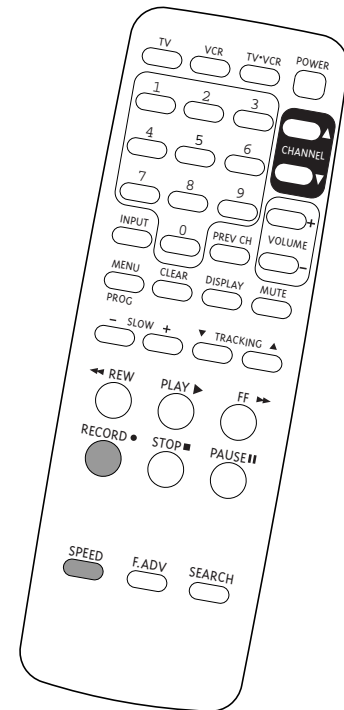
1. Turn on the VCR.
2. Insert a tape with safety tab in place.
3. Select the channel you want to record.
4. Select the desired recording speed using SPEED on the remote.
5. Press RECORD once to activate normal recording.
6. Press RECORD twice to activate XPR recording. Press RECORD repeatedly until the amount of recording time for the program is displayed in the VCR's display panel or on the TV screen.

Express Display on TV Screen	Press RECORD	Recording Time
RECORD LENGTH 0:00 CH 04	0:30	(30 Min)
	1:00	(1 Hr)
	1:30	(1 Hr, 30 Min)
	2:00	(2 Hrs)
	3:00	(3 Hrs)
	4:00	(4 Hrs)
Press REC to set length	0:00	(Normal Recording)

Each press increases the time — 30 minutes up to four hours.

The amount of time the VCR will record and X- REC will appear in the VCR's display panel.

You can increase the amount of recording time by pressing RECORD.



## Stopping a Recording in Progress

**With the VCR:** Press POWER and then STOP within a few seconds.

**With the Remote:** Press VCR and then STOP within a few seconds.

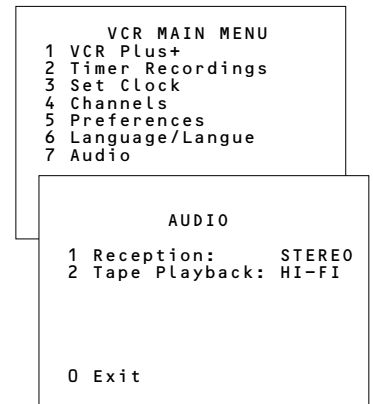
# Recording Broadcast Stereo TV or SAP (Second Audio Program)

Some TV programs are broadcast with stereo audio or a second audio language (SAP). The Reception: STEREO/MONO/SAP feature lets you select the type of audio you want to record.

## To Record Stereo Broadcast TV or SAP

Turn on the TV and tune it to the VCR viewing channel, either 3, 4, or TV's video input.

1. Insert a tape with safety tab in place.
2. If using one of the basic hookups, make sure the VCR indicator appears in the VCR's display panel. If not, press TV•VCR to turn it on.
3. Use SPEED on the remote to select a recording speed. The tape speed indicator appears in the VCR's display panel and on the TV screen.
4. Select the channel or line input to be recorded. The channel number or VIDEO appears on the TV screen.
5. Set the Reception: STEREO/MONO/SAP feature for the type of audio you want to record.
  - A. Press MENU to display the VCR MAIN MENU on the TV screen.
  - B. Press 7 to display the AUDIO menu.
  - C. Press 1 to select the type of audio Reception: STEREO, MONO, or SAP.
    - Set to STEREO for normal recording and to record broadcast stereo TV. The STEREO indicator lights in the VCR's display panel when the station you are tuned to is broadcasting stereo.
    - Set to MONO if the stereo signal is weak and the sound is too "noisy".
    - Set to SAP to record SAP (second audio program) instead of the normal audio on linear track. The SAP indicator ( ■ ) lights in the VCR's display panel when SAP is selected. Set the Tape Playback: HI-FI/LINEAR/MIX feature to LINEAR to hear SAP. *Details are on page 15.*
  - D. Repeatedly press 0 to remove the menus from the TV screen.
6. Press RECORD to start recording. REC appears in the VCR's display panel.
7. Press STOP when you are finished.



## Recording Audio Only

You can record audio only from another audio source connected to the AUDIO IN (L MONO and R) jacks on the back of the VCR. All video on the tape will be erased when you record audio only.

### To Record Audio Only

1. Press the INPUT button to select the line input.  
Press INPUT to record from the AUDIO IN jacks.  
L1 appears in the VCR's display panel.  
The VCR will record audio from the audio equipment connected to the AUDIO IN jacks.
2. Use SPEED on the remote to select the recording speed.  
The tape speed indicator appears in the VCR's display panel and on the TV screen.
3. Make sure the Reception: STEREO/MONO/SAP feature is set to STEREO.
  - A. Press MENU to display the VCR MAIN MENU on the TV screen.
  - B. Press 7 to display the AUDIO menu.
  - C. Press 1 to select Reception: STEREO.
4. Start audio source playing and press RECORD to begin recording.  
REC appears in the VCR's display panel.
5. Press STOP when you are finished.

```
VCR MAIN MENU
1 VCR Plus+
2 Timer Recordings
3 Set Clock
4 Channels
5 Preferences
6 Language/Langue
7 Audio
```

```
AUDIO
1 Reception: STEREO
2 Tape Playback: HI-FI

0 Exit
```

## Using Two VCRs for Copying and Editing Tapes

### Operating Instructions (Refer to hookup on page 6.)

Use this VCR as the playback VCR and the other as the recording VCR. If you have another compatible RCA, ProScan, or GE VCR that has a remote with VCR1 and VCR2 buttons, use the editing feature described below.

**Caution:** The unauthorized recording of television programs and other materials may infringe the rights of others.

1. Turn on the TV and VCRs.
2. Tune TV to the VCR viewing channel, either 3, 4, or TV's video input.
3. If you have connected your VCR using Option A (page 6), tune recording VCR to channel 3 or 4 — the one selected on the back of the playback VCR.

If you have connected your VCR using Option B (page 6), press INPUT on recording VCR's remote to select the line input (L1).

4. Insert the tape you want to copy into playback VCR. Insert a blank tape with safety tab in place into recording VCR.

To prevent recording on-screen displays from the playback VCR, press DISPLAY three times. See page 18 for details.

5. Press PLAY, then PAUSE on playback VCR when you reach the point on the tape or program where you want to begin copying. If the tape was not recorded on the playback VCR, streaks may appear and you may need to adjust tracking.
6. Press RECORD, then PAUSE, on recording VCR.
7. Press PAUSE buttons on both VCRs at the same time to begin copying the tape.\*
8. Edit out segments that you do not want to copy by pressing PAUSE on recording VCR to stop copying the tape. Then locate the next segment you want to copy on the playback VCR by using FWD, REW, and PLAY. Press PAUSE on the playback VCR. Press PAUSE at the same time on both VCRs to resume copying.
9. Press STOP on both VCRs when you are finished.

\* You may turn off the TV after the recording has started as it does not have to be on to copy a tape.

### Copying and Editing Using Compatible Remote

If you have a compatible RCA, ProScan, or GE remote with VCR1 and VCR2 buttons, you can program this VCR to respond to VCR1 or VCR2. This will allow you to control both VCRs with one remote for easier copying and editing.

Set the Remote Control feature of this VCR to the VCR1 or VCR2 position. The remote then controls the VCR with either the VCR1 or VCR2 button — whichever position you select in the menu.

1. Press MENU to display the VCR MAIN MENU.
2. Press 5 to display PREFERENCES.
3. Press 1 to activate the Remote Control feature.
4. Press VCR1 or VCR2 on your compatible remote to change the setting and program this VCR to respond to the VCR1 or VCR2 button — whichever you select.

**Important Reminder:** Remember you must press VCR1 or VCR2 on the remote — whichever you selected in the menu — before the remote will operate this VCR.

```
VCR MAIN MENU
1 VCR Plus+
2 Timer Recordings
3 Set Clock
4 Channels
5 Preferences
```

#### PREFERENCES

```
1 Remote Control: VCR1
2 Auto Play: ON
3 Auto TV/VCR: ON
```

Press VCR2 to change

#### PREFERENCES

```
1 Remote Control: VCR2
2 Auto Play: ON
3 Auto TV/VCR: ON
```

0 Exit



## Specifications

<b>Format:</b>	VHS
<b>Record/Playback System:</b>	Video: 4-Head Audio: 2 Hi-Fi record/playback system
<b>Video Signal System:</b>	EIA standard: NTSC color
<b>Antenna:</b>	75-ohm external VHF/UHF combined antenna terminal
<b>Tuner:</b>	USA: 181 channels capability* (125 cable channels) Canada: 178 channels capability* (122 cable channels)
<b>Type:</b>	AutoProgramming frequency synthesis
<b>Power Requirement:</b>	120V AC, 60 Hz
<b>Power Consumption:</b>	22 watts
<b>Dimensions:</b>	3.5 inches high (90 mm) 15.5 inches wide (393 mm) 12.5 inches deep (318 mm)
<b>Weight:</b>	9.5 pounds (4.3 kg)
<b>Storage Temperature Range:</b>	- 22°F to +149°F
<b>Operating Temperature Range:</b>	+41°F to +104°F

\*Check your cable company's compatibility requirements.

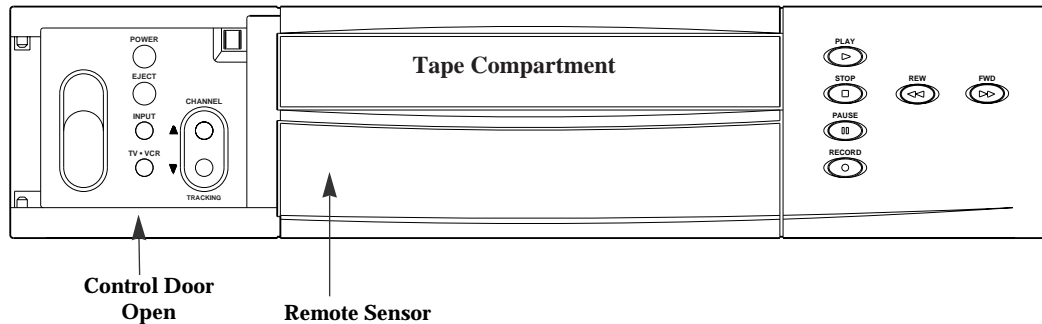
## Cleaning the VCR

Use a soft cloth or dusting attachment of your vacuum cleaner to dust your VCR. Remove dust from the ventilation holes on the top, back, sides, and bottom of the cabinet.

Plastic surfaces are easily scratched and can be marred by alcohol and various solvents. Avoid excessive use of oil-based furniture polishes since the materials used in the cabinet will accumulate more dust. We recommend using a non-abrasive, anti-static cleaner and polisher.

# Location of Controls

## Front Panel



### CHANNEL/TRACKING Up or Down

Selects next higher or lower channel in the VCR's channel memory.

Adjusts tracking when a tape is playing.

### EJECT

Press when the VCR is stopped to eject the cassette.

### FWD (Fast Forward)

Fast forwards the tape when the VCR is stopped.

Searches the picture forward during playback.

### INPUT

Turns the line input on or off. L1 appears in VCR's display panel and VIDEO appears on the TV screen.

Line input refers to the signal coming from the component connected to the audio/video input jacks.

### PAUSE

Pauses action for viewing during playback.

Pauses recording to prevent recording of unwanted scenes.

### PLAY

Plays a tape.

### POWER

Turns the VCR on or off.

### RECORD

Starts VCR recording.

Used for express recording (XPR).

### Remote Sensor

Receives signals from the remote control. Aim the remote at this sensor with no objects between them.

### REW (Rewind)

Rewinds the tape when the VCR is stopped.

Searches the picture in reverse during playback.

### STOP

Stops the normal functions such as record, playback, rewind, fast-forward, or pause.

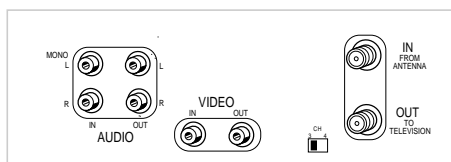
### TV-VCR

Switches the picture signal so that it either comes from the VCR or the TV channel.

See page 10.

# Location of Controls

## Back Panel



### CH3 CH4 Switch

Selects the channel to which you will tune the TV to see the VCR picture if you connect the VCR using one of the basic hookups.

### IN FROM ANTENNA Connector

Receives the signal from an antenna or cable system that is attached to this connector.

### OUT TO TELEVISION Connector

Passes signal to TV using the cable supplied.

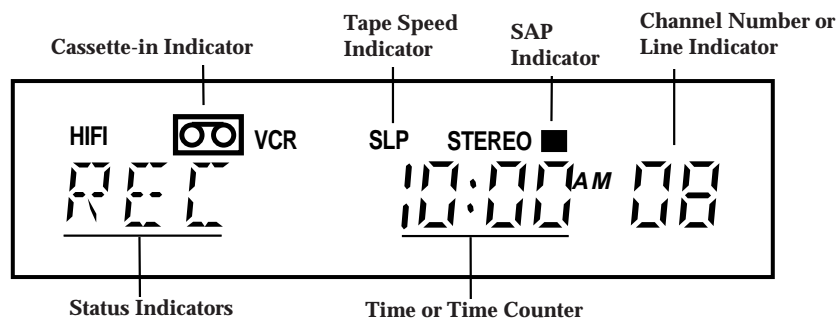
### AUDIO R and L MONO and VIDEO IN Jacks

Receives signals from another component, like a VCR or camcorder, when it is connected to these jacks. Use INPUT to select L1 in the VCR's display panel.

### AUDIO R and L and VIDEO OUT Jacks

Sends signals from VCR to another component, like a TV monitor or VCR, when it is connected to these jacks.

## Display Panel



### Cassette-in Indicator ( )

Lights when a tape is in the VCR.

### Channel Number or Line Indicator (L1)

The channel number or line indicator is displayed. Select L1 to record from the jacks on the back of the VCR.

### HIFI Indicator

Lights during hi-fi playback when Playback: HI-FI/LINEAR/MIX feature is set to HI-FI.

### SAP Indicator ( )

Lights when the Reception: STEREO/MONO/SAP feature is set to SAP.

### Status Indicators

Show what the VCR is doing.

BYE	Turned off
EJECT	Ejecting Tape
F--FWD	Fast forward
HELLO	Turned on
REC P	Record pause
PLAY	Playback
REC	Record
REW	Rewind

SRCH +	Forward search
SRCH -	Reverse search
SLOW +	Slow motion
STILL	Frame advance
STILL	Play pause
STOP	VCR stopped
TAPE flashes	Set for timer - no tape
TIMER	Timer recording set
X--REC	Express recording in progress

### STEREO Indicator

Lights when the station you are tuned to is broadcasting stereo.

### Tape Speed Indicators (SP, LP, or SLP)

Press SPEED to change.

### Time or Time Counter

Press DISPLAY to switch between the current time and elapsed-time counter.

### VCR Indicator (Applies Only to Basic Hookups)

Press TV•VCR to turn on or off.

VCR indicator on: Picture from VCR.

VCR indicator off: Picture from TV channel.

## Trouble Checks

Sometimes problems can be easily solved by checking a few basic things. Check below before you call for help or take your VCR to an Authorized RCA VCR Servicenter.

Trouble	Here's what to try:
<b>No power</b>	<ul style="list-style-type: none"> <li>• Plug VCR into an operating outlet.</li> <li>• Check connections.</li> </ul>
<b>VCR does not respond to remote</b>	<ul style="list-style-type: none"> <li>• Remove batteries and hold down one or more buttons for several seconds to drain the microprocessor inside the remote to reset it. Reinstall the batteries and try remote again.</li> <li>• Press VCR to set remote to control the VCR. <i>See page 12.</i></li> <li>• Aim remote at VCR with no objects between them.</li> <li>• Change batteries.</li> <li>• Check setting of Remote Control: VCR1/VCR2 feature. <i>See page 30.</i></li> </ul>
<b>Remote no longer controls an RCA TV</b>	<ul style="list-style-type: none"> <li>• Remove batteries and hold down one or more buttons for several seconds to drain the microprocessor inside the remote to reset it. Reinstall the batteries and try remote again.</li> <li>• Press TV to set remote to control the TV. <i>See page 11.</i></li> <li>• Reprogram remote for RCA TV. <i>See page 11.</i></li> <li>• Aim remote at TV with no objects between them.</li> <li>• Change batteries.</li> </ul>
<b>Remote no longer controls a compatible TV</b>	<ul style="list-style-type: none"> <li>• Press TV to set remote to control the compatible TV. <i>See page 11.</i></li> <li>• Aim remote at TV with no objects between them.</li> <li>• Reprogram remote after batteries have been changed.</li> <li>• Change batteries.</li> </ul>
<b>No picture when VCR turned on – using a basic hookup</b>	<ul style="list-style-type: none"> <li>• Press TV•VCR to turn VCR indicator on. <i>See page 10.</i></li> <li>• Check to see if Auto TV/VCR feature is set to OFF. <i>See page 10.</i></li> </ul>
<b>Poor or no picture for normal TV viewing</b>	<ul style="list-style-type: none"> <li>• Press TV•VCR to turn VCR indicator off.</li> <li>• Switch TV to an active channel.</li> <li>• Check antenna connections.</li> </ul>
<b>Snowy or no picture during playback</b>	<ul style="list-style-type: none"> <li>• Press TV•VCR to turn VCR indicator on.</li> <li>• Check TV channel selected (3 or 4) to make sure it matches the channel selected with CH3 CH4 switch on back of VCR.</li> <li>• Check TV's fine tuning.</li> <li>• Check video cable connections between VCR and TV monitor.</li> <li>• Set TV monitor to video input channel.</li> <li>• Try another tape.</li> <li>• Some snow/streaks are normal during search, frame advance, slow-motion, or stop-action playback.</li> </ul>
<b>Time counter not working</b>	<ul style="list-style-type: none"> <li>• The time counter does not advance during unrecorded portions of tape. When an unrecorded segment of tape is encountered, the time counter will hold its count until recorded material is detected again.</li> <li>• A minus (-) will appear in front of the time if you rewind the tape farther back than a counter reading of 0:00:00.</li> </ul>
<b>Will not record or play</b>	<ul style="list-style-type: none"> <li>• No cassette in VCR.</li> <li>• Eject and re-insert cassette.</li> <li>• Broken tape — try another cassette.</li> </ul>

# Trouble Checks

Trouble	Here's what to try:
<b>Streaks in picture during normal playback</b>	<ul style="list-style-type: none"> <li>• Some snow/streaks are normal during search, frame advance, slow-motion, or stop-action playback.</li> </ul>
<b>Will not record</b>	<ul style="list-style-type: none"> <li>• VCR is in pause mode. Press PAUSE.</li> <li>• Safety tab removed from cassette.</li> <li>• Make sure the line indicator (L1) is turned off in VCR's display panel for normal recording from the VCR's tuner. Press INPUT to turn off the line indicator.</li> </ul>
<b>Rewind does not operate</b>	<ul style="list-style-type: none"> <li>• Tape already rewound.</li> </ul>
<b>VCR Plus+ or timer recording not made or wrong program recorded</b>	<ul style="list-style-type: none"> <li>• Wrong PlusCode number entered.</li> <li>• Cable box was not turned on or was tuned to the wrong channel at time recording was to begin.</li> <li>• Program entered incorrectly (wrong channel or times).</li> <li>• Power interruption. Clock area in display panel will show --:--.</li> <li>• Check to see if time and date are correct — including AM/PM.</li> <li>• Program exceeded tape's length or tape was not rewound beforehand.</li> <li>• VCR was not turned off at the time recording was to start.</li> <li>• No tape in VCR or cassette's safety tab broken off.</li> </ul>
<b>Clock shows incorrect time or date</b>	<ul style="list-style-type: none"> <li>• Power interruption. Clock on the front panel will show --:--.</li> <li>• Clock was not set accurately (check AM/PM and date).</li> <li>• Time counter display appears in VCR's display panel. Press DISPLAY on remote.</li> </ul>
<b>VCR makes noise when stopped</b>	<ul style="list-style-type: none"> <li>• VCR is removing tape from heads. This is normal. The head cylinder inside the VCR will continue to rotate for a few minutes after you put the VCR in the stop mode.</li> </ul>
<b>Will not auto channel search active channels correctly</b>	<ul style="list-style-type: none"> <li>• Check antenna connections.</li> <li>• Check Signal Type: CABLE/ANTENNA feature. <i>See page 8.</i></li> </ul>
<b>Cannot select channels over 69</b>	<ul style="list-style-type: none"> <li>• Cable channels over 69 can only be selected if Signal Type: CABLE/ANTENNA feature is set to CABLE. <i>Details are on page 8.</i></li> </ul>
<b>Cassette with safety tab removed does not start to play automatically</b>	<ul style="list-style-type: none"> <li>• Set Auto Play ON/OFF feature to ON. <i>Details are on page 15.</i></li> </ul>
<b>Displays appear in wrong language</b>	<ul style="list-style-type: none"> <li>• Language feature set incorrectly. <i>Details are on page 9.</i></li> </ul>
<b>Stereo or SAP sound not recorded</b>	<ul style="list-style-type: none"> <li>• Reception: STEREO/SAP/MONO feature must be set to STEREO to record broadcast stereo. <i>See page 28.</i></li> <li>• Reception: STEREO/SAP/MONO feature must be set to SAP to record SAP. <i>See page 28.</i></li> <li>• STEREO indicator not on. Station not broadcasting stereo.</li> </ul>
<b>No stereo sound during playback</b>	<ul style="list-style-type: none"> <li>• Tape Playback: HI-FI/LINEAR/MIX feature must be set to HI-FI to hear stereo sound during playback. <i>See page 15.</i></li> <li>• An advanced hook-up must be used for stereo playback. <i>See pages 3-6.</i></li> </ul>
<b>Stereo audio too noisy</b>	<ul style="list-style-type: none"> <li>• Stereo signal is weak. Set Reception: STEREO/SAP/MONO feature to MONO.</li> <li>• Press one of the TRACKING up or down buttons to minimize the noise.</li> </ul>

## Limited Warranty

What your warranty covers:

- Any defect in material or workmanship.

For how long after your purchase:

- Ninety days for labor charges.
- One year for parts.

The warranty period for rental units begins with the first rental or 45 days from the date of shipment to the rental firm, whichever comes first.

What we will do:

- Pay any Authorized RCA VCR Servicenter the labor charges to repair your VCR.
- Pay any Authorized RCA VCR Servicenter for the new or, at our option, refurbished replacement parts required to repair your VCR.

How you get service:

- Take your VCR to any Authorized RCA VCR Servicenter. To identify your nearest Authorized RCA VCR Servicenter, ask your dealer, look in the Yellow Pages, or call 1-800-336-1900.
- Show the service technician your evidence of purchase date.
- Pick up your VCR when repairs are completed.

What your warranty does not cover:

- Customer instruction. (Your Owner's Manual clearly describes how to install, adjust, and operate your VCR. Any additional information should be obtained from your Dealer.)
- Installation and related adjustments.
- Signal reception problems not caused by your VCR.
- Damage from misuse or neglect.
- Cleaning of video/audio heads.
- Remote control batteries.
- A VCR that has been modified or incorporated into other products or is used for institutional or other commercial purposes.
- A VCR purchased or serviced outside the USA.
- Acts of God, such as but not limited to lightning damage.

Product Registration:

- Please complete and mail the Product Registration Card packed with your VCR. It will make it easier to contact you should it ever be necessary. The return of the card is not required for warranty coverage.

How state law relates to this warranty:

- This warranty gives you specific legal rights, and you also may have other rights that vary from state to state.

If you purchased your VCR outside the United States:

- This warranty does not apply. Contact your dealer for warranty information.

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1-800-336-1900

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If your VCR needs service, please contact your dealer  
or the nearest Servicenter from the yellow pages.  
Please do not send any products to the Indianapolis  
address listed in this manual or on the carton. This  
will only add delays in service for your product.

 **THOMSON CONSUMER ELECTRONICS**

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